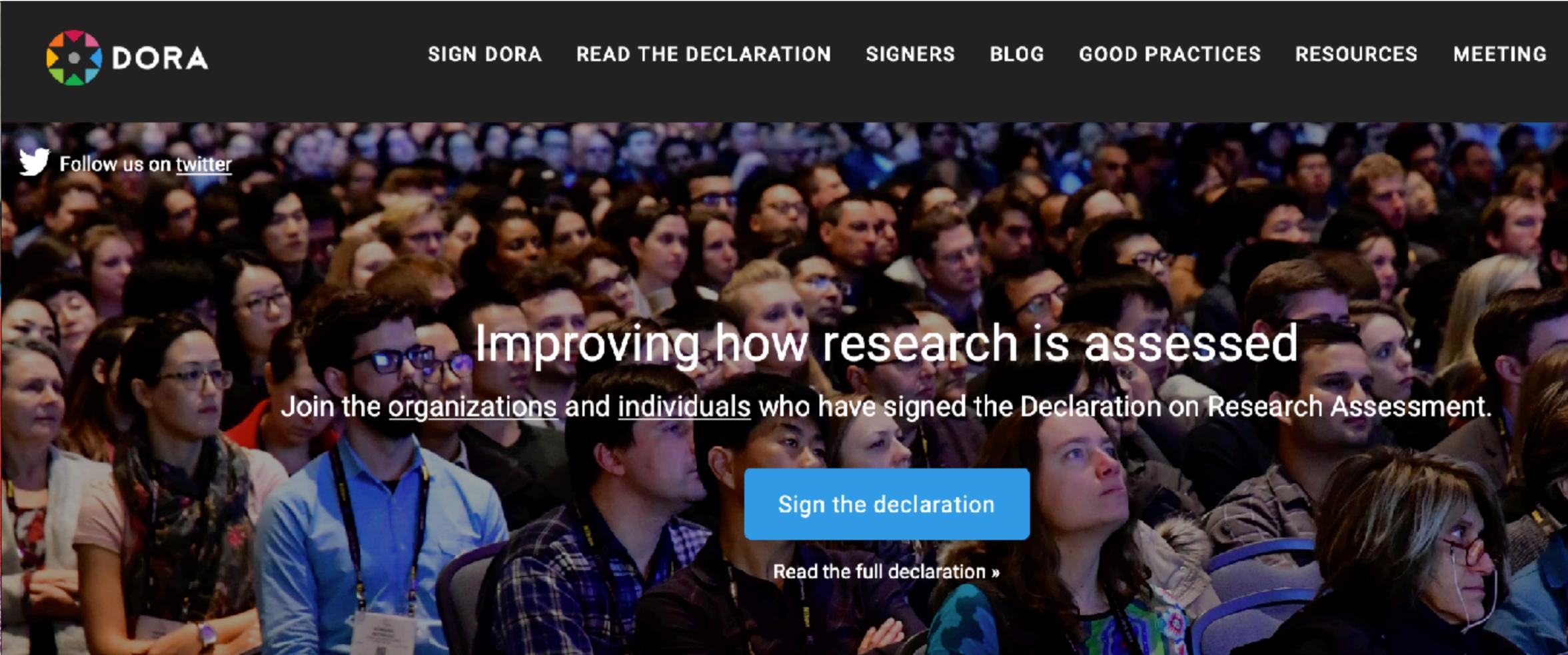
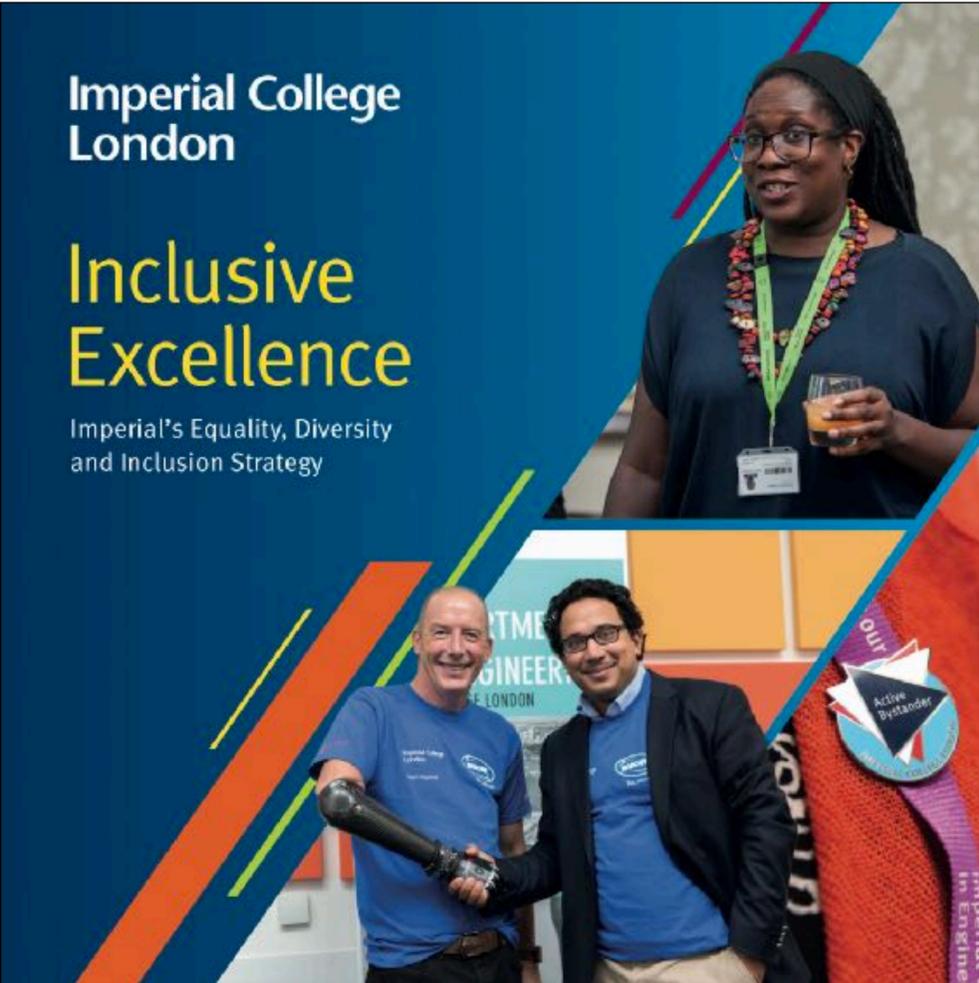


how research on research can help to inform and accelerate positive changes in research cultures



Stephen Curry

Imperial College and DORA

Research on Research Institute | 30 Sept 2019



Some personal, philosophical and practical reflections

Stephen Curry

Department of Life Sciences

Professor of Structural Biology

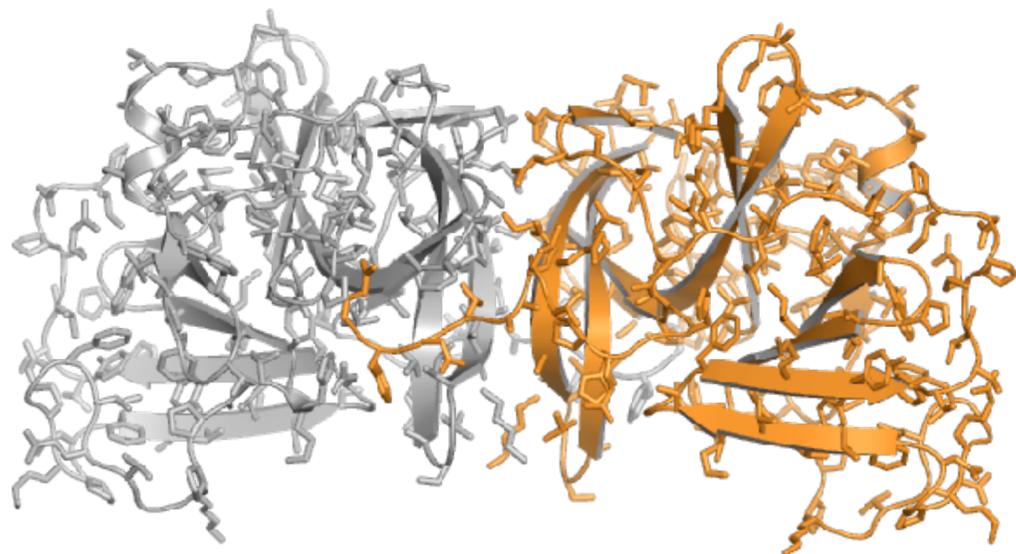
Assistant Provost (Equality, Diversity & Inclusion)

Science blogger/writer
Chair, Declaration on Research Assessment (DORA)

Vice-chair, Science is Vital

Board member, CaSE

Member, HEFCE Metrics Review



PLOS PATHOGENS

RESEARCH ARTICLE

A Conserved Interaction between a C-Terminal Motif in Norovirus VPg and the HEAT-1 Domain of eIF4G Is Essential for Translation Initiation

Eoin N. Leen^{1*}, Frédéric Sorgeloos², Samantha Correia^{1†}, Yasmin Chaudhry², Fabien Cannac^{1‡}, Chiara Pastore¹, Yingqi Xu¹, Stephen C. Graham², Stephen J. Matthews¹, Ian G. Goodfellow², Stephen Curry^{1*}

¹ Department of Life Sciences, Imperial College London, London, United Kingdom, ² Division of Virology, Department of Pathology, University of Cambridge, Addenbrooke's Hospital, Cambridge, United Kingdom

[†] Current address: Section of Virology, Faculty of Medicine, Imperial College London, St Mary's Campus, London, United Kingdom
[‡] Current address: Department of Biology, Paul Scherrer Institut, ETH Zürich, Villigen PSI, Switzerland

* eoin.leen07@imperial.ac.uk (ENL); s.curry@imperial.ac.uk (SC)

CrossMark
OPEN ACCESS

Reciprocal Space

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Home About Stephen

— Coming soon — I'm a scientist — making the film —

Is Massively Collaborative Scientific Publishing Possible?

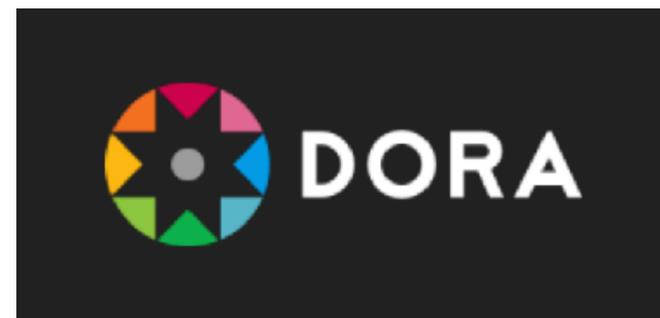
Posted on September 2, 2011 by Stephen

The job of a newspaper columnist is to agitate and George Monbiot did exactly that last week with a [link to this](#) in The Guardian about academic publishers. It may have been an odd choice for most of his readers but Monbiot seemed to be actually shading with rage as he lashed into the companies that gather and disseminate the academic literature, flogging them repeatedly for charging scientists to publish, for demanding that they provide peer review services for free and, damn them all, for stuffing journals behind paywalls that impoverish universities and prevent the public from accessing the fruits of research that their taxes have probably funded.

Recent Posts

- HOW TO BE A BIT?
- IDYMI No. 5: Asking universities to be open about research assessment
- Transient Memory
- IDYMI No. 4: Books to read before university
- IDYMI No. 3: Academic publishing on the web

<http://occamstypewriter.org/scurry/>



the guardian

home science UK world politics sport football opinion culture

The scientific impact of Brexit: it's complicated

Stephen Curry

Is UK science better off in or out of the EU? The arguments are complex and only partially evidence-based. And that's not surprising.



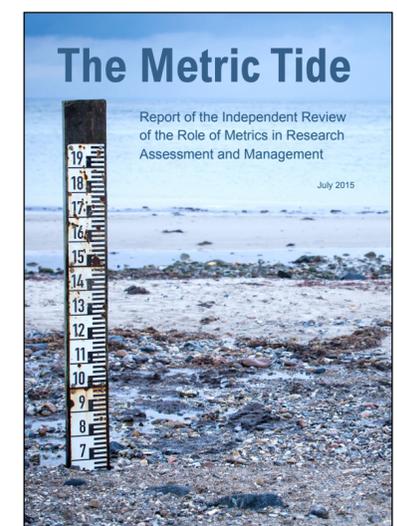
Don't be flattered by flag-waving — have a closer look at the facts. Photograph: Christopher Fildes/Getty Images

Stephen Curry
Wednesday 13 April 2016 12:00 PM

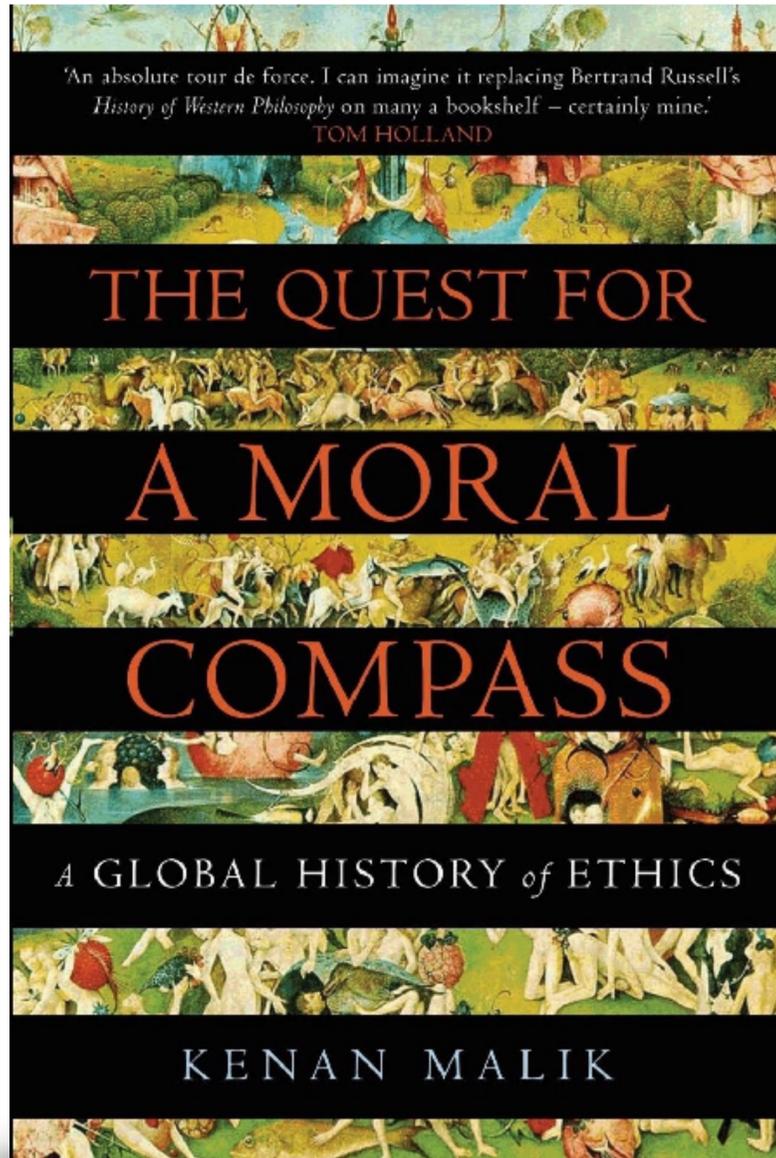
31 Shares 66 Comments

Politics is so much more complicated than science. For every action there isn't an equal and opposite reaction and nor are there equations that predict how the system will respond to changes in the input conditions. So how do we work out what to do when it comes to the referendum on whether or not Britain should stay in the European Union?

<http://www.theguardian.com/profile/stephen-curry>

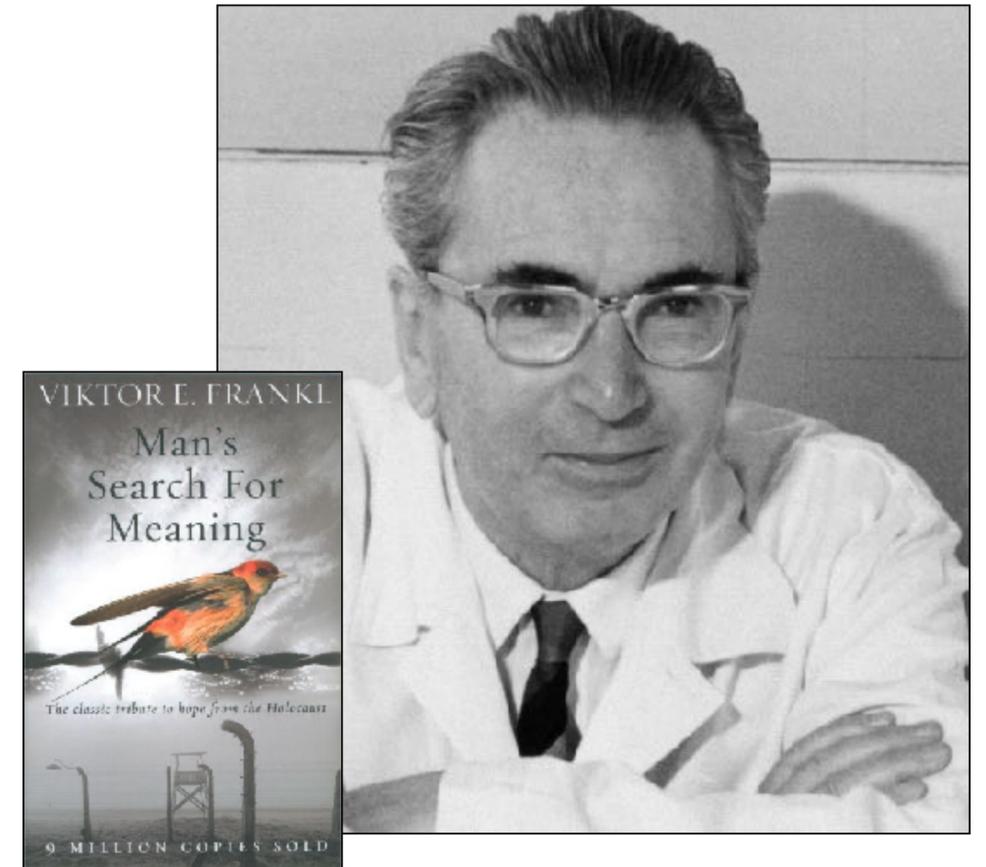


We are talking about culture - and about moral purpose



“As new possibilities of social transformation were opened up... people asked themselves not simply ‘What moral claims are rational given the social structure?’, but also... What kind of society... will best allow human beings to flourish?”

How do we operationalise moral purpose?



“Don’t aim at success—the more you aim at it and make it a target, the more you are going to miss it. For success, like happiness, cannot be pursued; it must ensue, and it only does so as the unintended side-effect of one’s dedication to a cause greater than oneself...”

Wider currents: a new politics of hope

Problem:

“the faith that market mechanisms are the primary instruments for achieving the **public good.**”

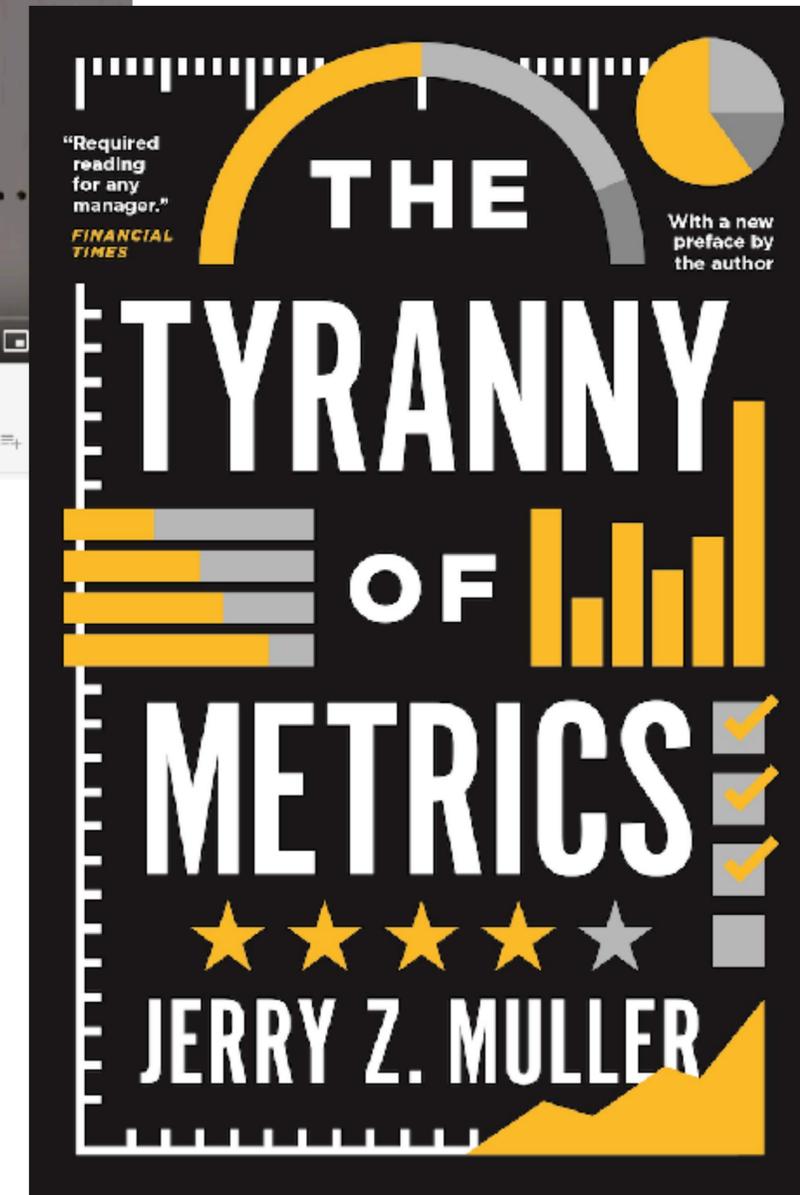
“the tendency of governing elites to **drain public discourse of substantive moral argument** to treat ideologically contestable questions as if they were matters of **economic efficiency.**”

“We need to begin to **tell stories** that frame politics around genuine **appreciation and social recognition** for **contributions to the common life** and to **collective well-being** that go **beyond how the market [...]** defines the value of your contribution.”



https://www.youtube.com/watch?v=LCZhA-_1n4E

Michael Sandel
Dec 2018



A brief history of metrics in research assessment...

May 2013



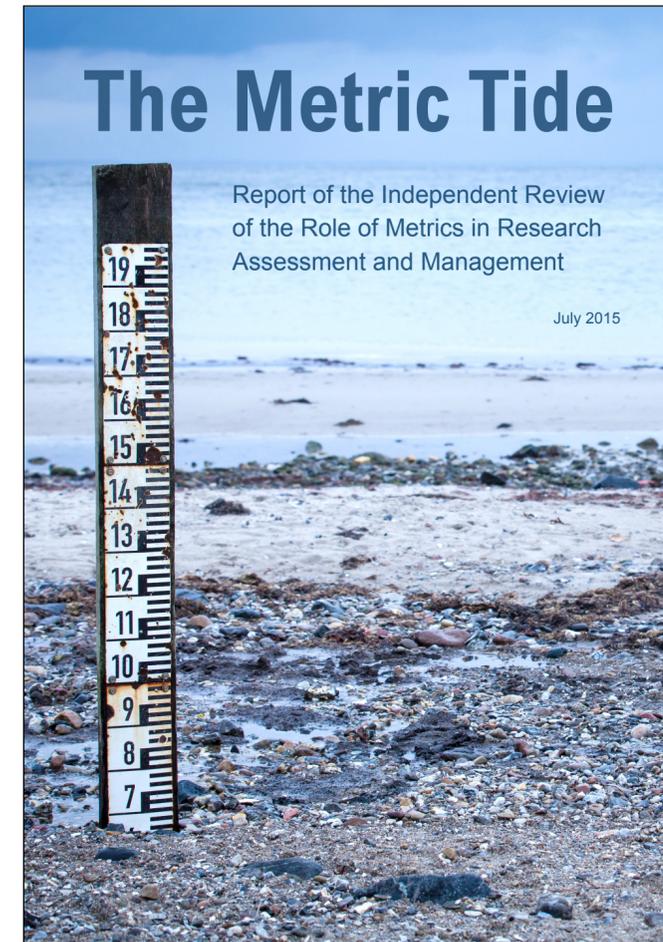
<https://sfdora.org>

Mar 2015



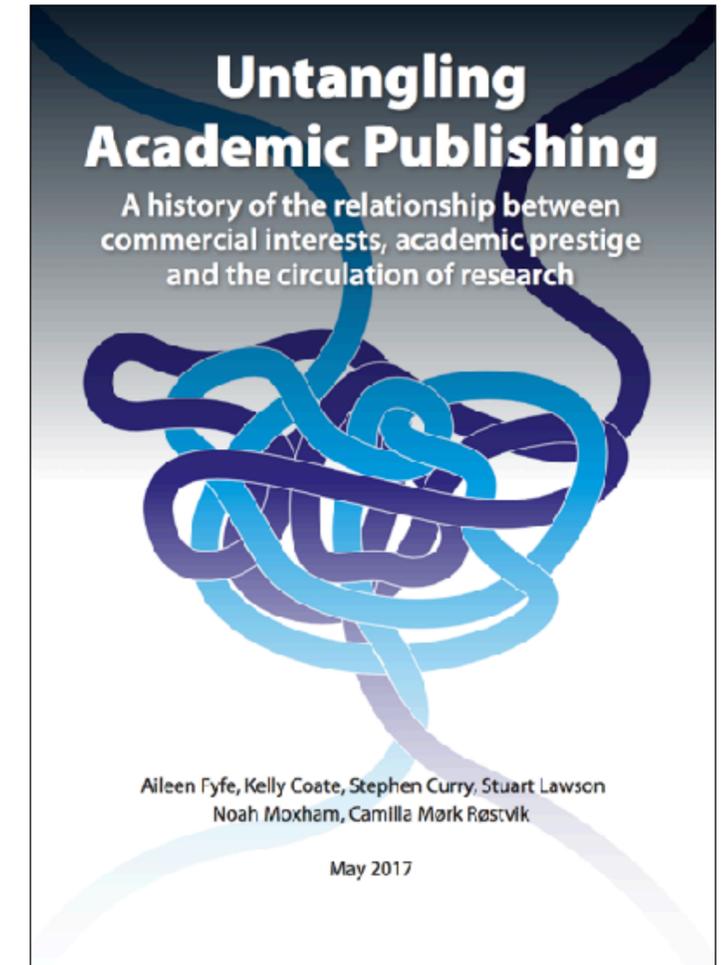
<http://www.leidenmanifesto.org>

Jul 2015



UK Forum for Responsible Research Metrics

May 2017



<https://zenodo.org/record/546100#.XKESdy2ZPOQ>

We need to re-imagine how we do research

Why we need to reimagine how we do research



Jeremy Farrar

Director
Wellcome

The emphasis on excellence in the research system is stifling diverse thinking and positive behaviours. As a community we can rethink our approach to research culture to achieve excellence in all we do.



“We know that Wellcome has helped to create this focus on excellence. Our aim has rightly been to support research with the potential to benefit society. But I believe that we now also have an important role to play in changing and improving the prevailing research culture. **A culture in which, however unintentionally, it can be hard to be kind.**”

Everything is connected



Trinity College Dublin
Coláiste na Tríonóide, Baile Átha Cliath
The University of Dublin



'When a measure becomes a target it ceases to be a good measure' –
Goodhart's Law

olarship

Unboxing

Research Impact & Evaluation in an Open Scholarship Era

“DORA, Funding Agencies & Research Culture”

Hypothesis: openness is the key to reform of research evaluation and to bringing equality, diversity and inclusion to the core of our thinking.

Supported by the Wellcome Institutional Strategic Support Fund



#TCDResearchImpact #UnboxingOpenScholarship

We need to show how *open* science can be *better* science

Preprints: faster communication

Focus on the content, not the journal

Encourages **open peer review**

OA: Worldwide audience (sharing + scrutiny = reliability)

Data sharing: re-use & scrutiny benefits (reliability)

Better for **impact** in the real world (*e.g.* zika crisis)

Peer review and scientific publishing
Occam's corner

Peer review, preprints and the speed of science

Peer review is often claimed to be the guarantor of the trustworthiness of scientific papers, but it is a troubled process. Preprints offer a way out

Stephen Curry
@Stephen_Curry

Monday 7 September 2015 11:00 BST

1 Share 14 Comments

Save for later

Subediting skills for

A few weeks ago journal. We have machinery of inf review, our pap

Science
Occam's corner

Zika virus initiative reveals deeper malady in scientific publishing

Stephen Curry

Moves to speed up the release of Zika virus research in response to the public health crisis highlight a systemic failure in scientific publishing. Help could be at hand at the ASAPbio meeting today in the USA

Contact author
@Stephen_Curry

Tuesday 16 February 2016 11:54 GMT

539 Shares 4 Comments

Save for later

Too far behind a s
Photograph: Victor M

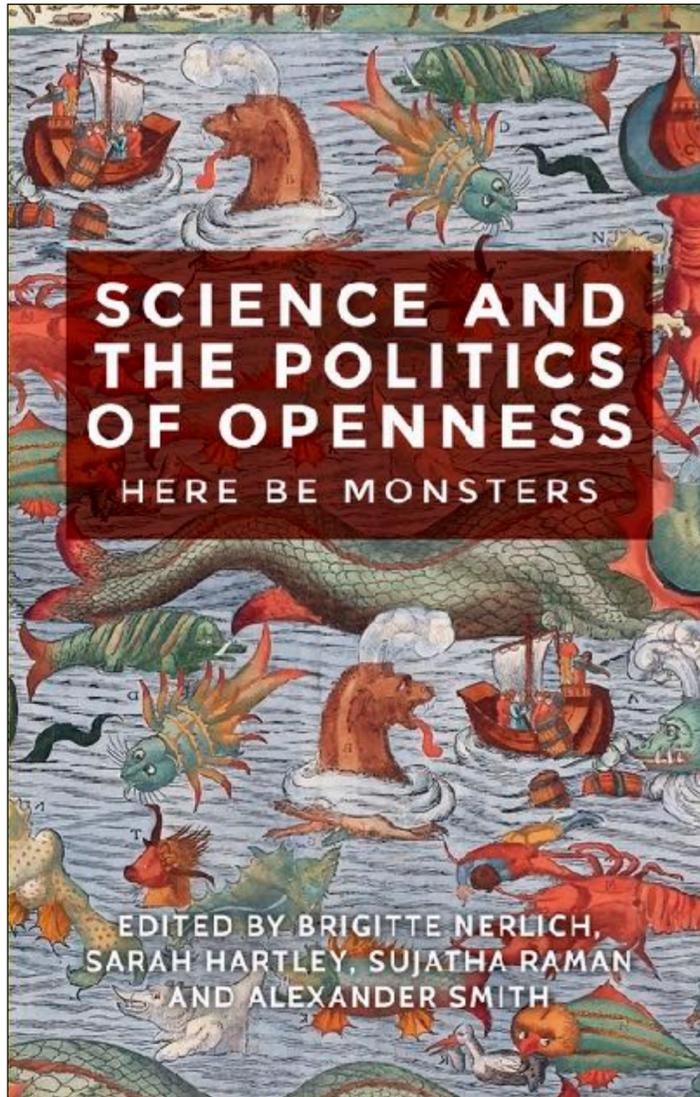
In response
now declar
Health Org
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rapidly and ope

All Projects

Showing 1-25 of 48 found

WILDFIRE BURNING	FOSSIL FINDER	GALAXY360: BIRDS IN SPACE	WALLET AT WORK	SHARPLY POINTED MARKS
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Open science is not just about sharing papers and data...



<http://oapen.org/search?identifier=643155>

Open access: the beast that no-one could – or should – control?

Stephen Curry

‘The main thing, it seems to me, is to remember that technology manufactures not gadgets, but social change,’ declared science historian and broadcaster James Burke in a lecture given in 1985 (Burke, 2005). This was several years before the rise of the personal computer and the internet. But history’s knack of repeating itself means that the words are no less true of the digital transformation of the world in the last two decades. The recasting of information into digital forms that can be replicated and transmitted instantly across the globe has changed our relationship with it in myriad ways. This poses commercial

How should the academy think about democratic accountability?

- freedom *and* responsibility

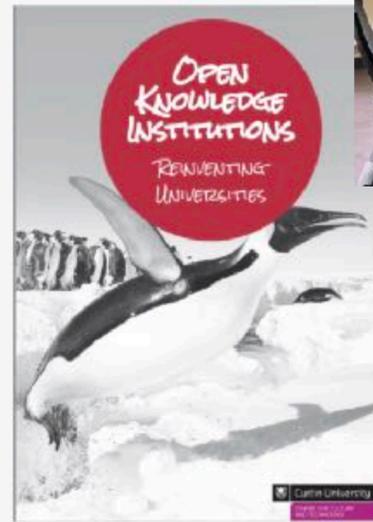
How open is the academy for public inquiry – and involvement

- *e.g.* patient groups, environmental action, citizen science

Openness as *inclusion*

The Curtin Open Knowledge Initiative (COKI)

Universities exist to support the creation and transfer of knowledge. Efforts by universities to enable open knowledge have the potential to broaden the impact of higher education and research institutions. Our team is exploring the mechanisms that will allow universities to work more effectively with local and global communities in the production of knowledge; as well as those that support its uptake and application both within and beyond academia.



Open Knowledge Institutions book cover



Open access and open science raise issues surrounding:

- North vs South (global economic inequalities)
- Who gets in to the academy (equality, diversity and inclusion)?
- Who gets to decide what research questions to ask?

<https://ccat.curtin.edu.au/programs/innovation-knowledge-communication/curtin-open-knowledge-initiative-coki/>



https://www.opencon2018.org/whats_next_for_opencon

We need to assess research but how should we define success?



https://en.wikipedia.org/wiki/File:Dr._Sadhna_Joshi_and_Research_Group.jpg

Reliable, rapidly communicated, accessible, high-quality **research** that transforms our understanding of the world and can change it for the better.

Researchers who collaborate, who feel a duty of care to group members & colleagues, and a responsibility to the societies of which they are an integral part.

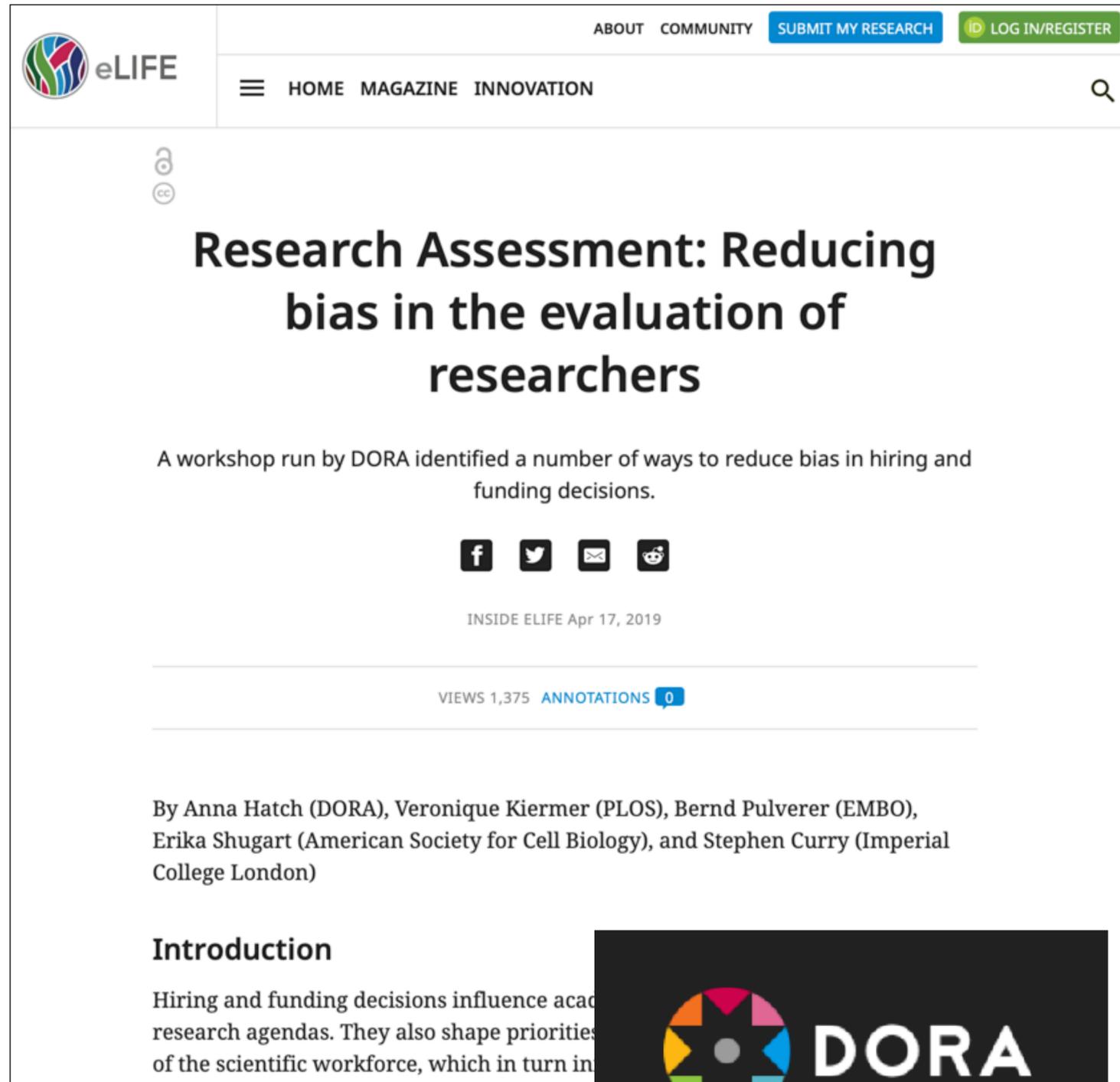
A **research system** that values the people within it, that cares about their quality of life, and that seeks out the creative vigour of diversity.



Do we need the evidence that DORA works?

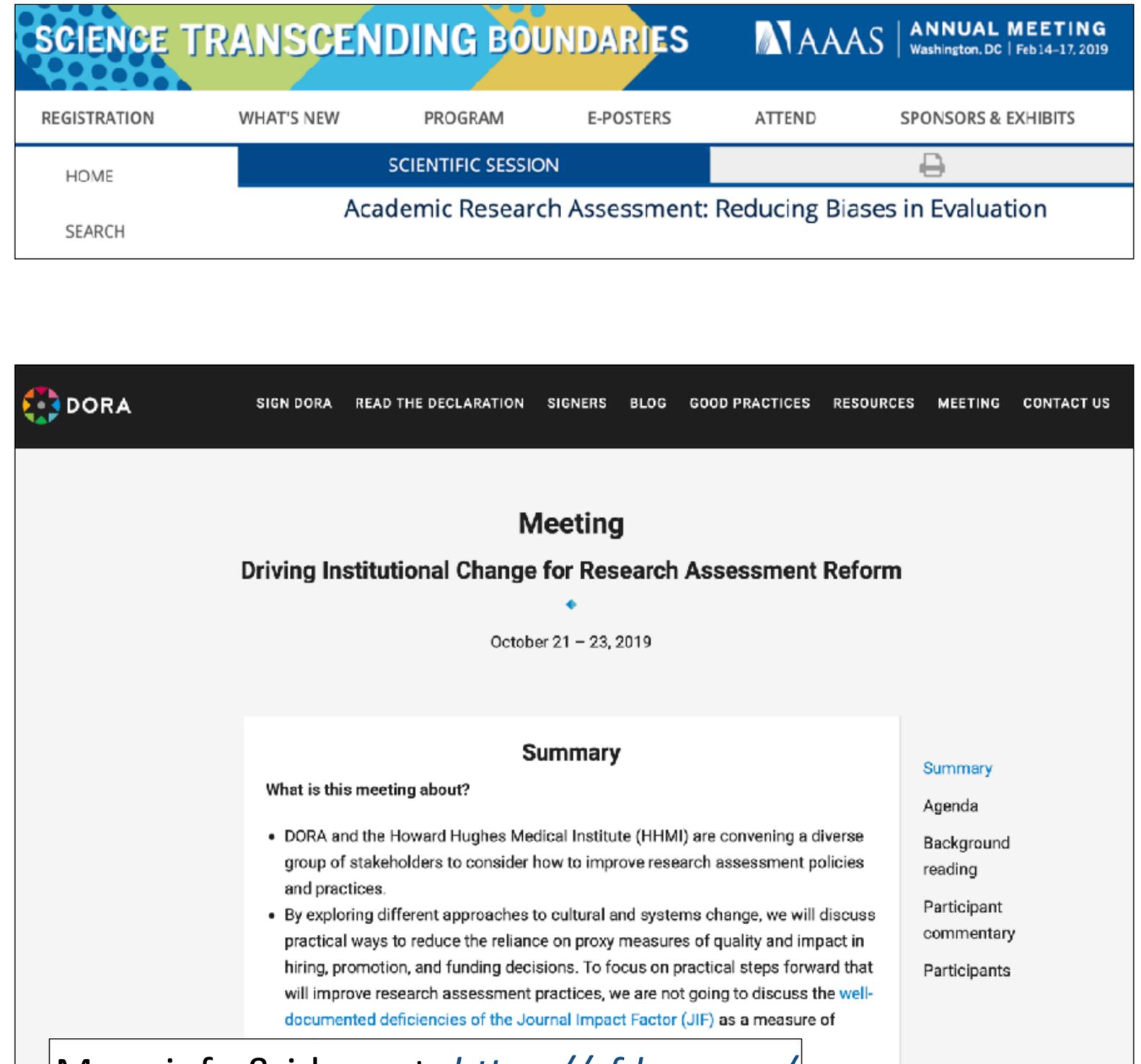
DORA: building, promoting and testing new tools and processes for evaluation

DORA session at ASCB|EMBO (Dec 2018)



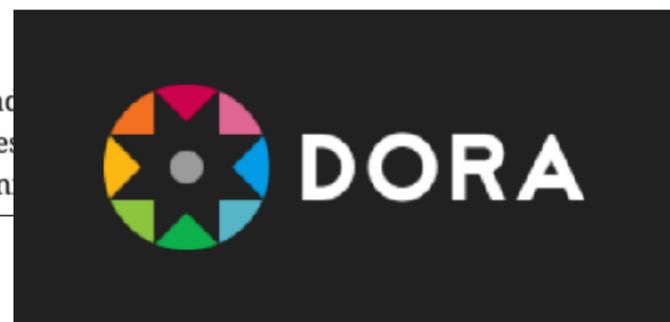
The screenshot shows the eLIFE website interface. At the top, there are navigation links: ABOUT, COMMUNITY, SUBMIT MY RESEARCH, and LOG IN/REGISTER. Below this is a menu with HOME, MAGAZINE, and INNOVATION. The main content area features the article title "Research Assessment: Reducing bias in the evaluation of researchers" in large, bold black text. Below the title is a sub-headline: "A workshop run by DORA identified a number of ways to reduce bias in hiring and funding decisions." There are social media icons for Facebook, Twitter, Email, and Reddit. Below these, it says "INSIDE ELIFE Apr 17, 2019". At the bottom of the article preview, it shows "VIEWS 1,375" and "ANNOTATIONS 0". The author information at the bottom reads: "By Anna Hatch (DORA), Veronique Kiermer (PLOS), Bernd Pulverer (EMBO), Erika Shugart (American Society for Cell Biology), and Stephen Curry (Imperial College London)".

DORA session at AAAS (Feb 2019)



The screenshot shows the AAAS Annual Meeting website. The header includes "SCIENCE TRANSCENDING BOUNDARIES" and "AAAS ANNUAL MEETING Washington, DC | Feb 14-17, 2019". Navigation links include REGISTRATION, WHAT'S NEW, PROGRAM, E-POSTERS, ATTEND, and SPONSORS & EXHIBITS. A secondary navigation bar shows HOME, SCIENTIFIC SESSION (highlighted), and a search icon. Below this, the session title "Academic Research Assessment: Reducing Biases in Evaluation" is displayed. The main content area features the DORA logo and navigation links: SIGN DORA, READ THE DECLARATION, SIGNERS, BLOG, GOOD PRACTICES, RESOURCES, MEETING, and CONTACT US. The central heading is "Meeting Driving Institutional Change for Research Assessment Reform" with the dates "October 21 - 23, 2019". Below this is a "Summary" section with the heading "What is this meeting about?". The summary text states: "DORA and the Howard Hughes Medical Institute (HHMI) are convening a diverse group of stakeholders to consider how to improve research assessment policies and practices. By exploring different approaches to cultural and systems change, we will discuss practical ways to reduce the reliance on proxy measures of quality and impact in hiring, promotion, and funding decisions. To focus on practical steps forward that will improve research assessment practices, we are not going to discuss the well-documented deficiencies of the Journal Impact Factor (JIF) as a measure of". To the right of the summary is a sidebar menu with links: Summary, Agenda, Background reading, Participant commentary, and Participants.

More info & ideas at: <https://sfdora.org/>



How to have competition without hyper-competition?

Reciprocal Space

Brought to you by [Occam's Typewriter](#)



Home About Stephen

← The Importance of Being Confident Interesting Times →

The shove that dare not speak its name

Posted on [January 24, 2011](#) by [Stephen](#)

The following is a commentary that has been published today (in a slightly edited form) in [Chemistry and Industry](#).

Only the excellent need apply. Such is the [message](#) on research funding from nobelist Sir Paul Nurse, incoming president of the Royal Society. It is a message echoed by the Wellcome Trust — a major funder of the medical and life sciences in the UK — which has abandoned project and program grant support in favour of an investigator award scheme. This will offer generous long-term support to “the brightest researchers with the best ideas”. These grants will be a boon to anyone who gets one but Wellcome has [acknowledged](#) that they will be funding fewer individuals than under their previous arrangements. David Delpy, Chief Executive of the EPSRC appears to favour a [similar approach](#).

Recent Posts

- [I told myself...](#)
- [The unsustainable goal of university ranking](#)
- [How to value what cannot be measured?](#)
- [Thinking globally about research evaluation – LIS-Bibliometrics talk](#)
- [Endings and Beginnings](#)
- [Academic freedom and responsibility: why Plan S is not unethical](#)

Recent Comments

“Since there is recognized value in stable, long-term funding, why not offer it to the many and not just the few? A system that offers increased stability could well reap major productivity boosts. A scheme that would, for example, fund at least one research assistant or technician post for every tenured university scientist — perhaps to be reviewed or adjusted every 5-7 years according to productivity — would smooth out many of the stresses and strains of the current system.”

<http://occamstypewriter.org/scurry/2011/01/24/the-shove-that-dare-not-speak-its-name/>

How to have competition without hyper-competition?

Leadership...

Leaders set direction and help themselves and others to do the right thing to move forward. To do this they create an inspiring vision, and then motivate and inspire others to reach that vision. They build and coach their teams to make them ever stronger and manage the delivery of the vision. They galvanise a group of people to achieve a common goal, often one that was not thought possible.

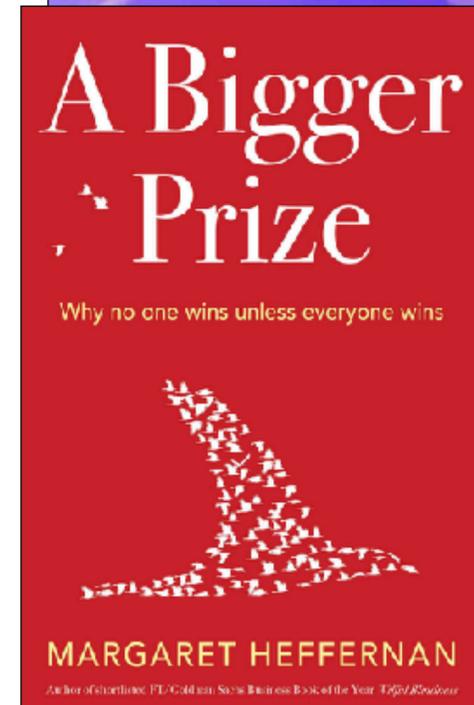
"Leadership is the art of achieving more than the science of management says is possible"

Imperial College London

2:46 / 52:10 Colin Powell, 65th United States Secretary of State

Myth-busting the military: What academia could learn

<https://www.youtube.com/watch?v=b2sqp7Kjy8>



"Science is at its best when at its most collaborative, inclusive and diverse."

Margaret Heffernan
June 2019

"My one aim is for everyone to understand how important leadership is within the academic setting and how we could do more to incorporate that into the academic culture."

Nadia Soliman
March 2019

How to translate the intellectual hollowness at the heart of league tables into action?

WONKHE ABOUT US+ EVENTS LATEST+ JOBS+ SUBSCRIPTION+ SUS+  

Do university rankings measure anything at all?

ANALYSIS | 25/09/19

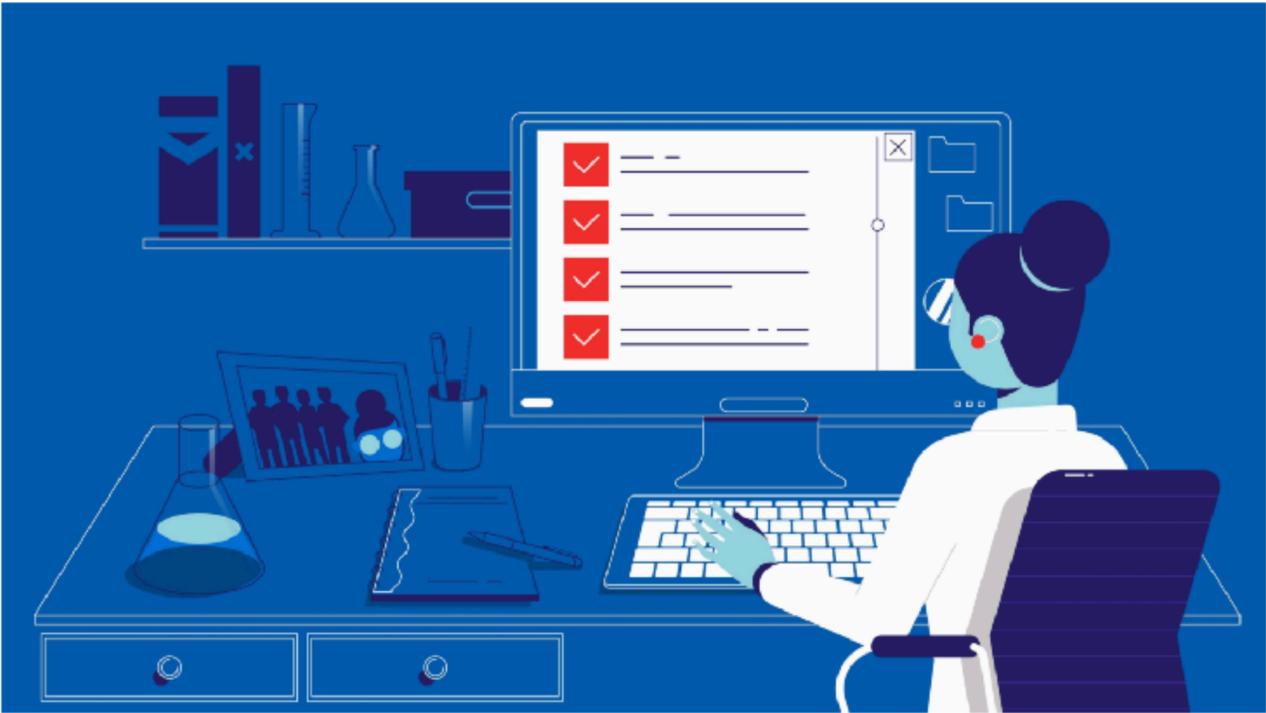


Image: Shutterstock

Author 

Cameron Neylon
Cameron Neylon is Professor of Research Communications at the Centre for Culture and Technology at Curtin University

There are many complaints that we might make about university rankings.

Mostly these fall into two categories. The first is that they simply reinforce existing power structures, privileging western, english-speaking universities and maintaining an exclusive club, which is impossible to break into and self-perpetuating. The second is that the data used and the processes used to analyse them are incomplete, biased towards specific universities, and the methodology flawed for the use that they're being put to.

The response is that rankings at least provide some objective view of university performance, that some data is required to inform strategic decision making, or

TAKE A WALK ON THE WONK SIDE

“If they measure anything at all, it appears to be visibility and prestige, something that feeds on itself, and would be predicted to lead to fixation at the top of the rankings. In fact it is worse than that. By giving these rankings importance and meaning, we concentrate our attention merely on doing well at them. The statistical analysis suggests that they are biased, unstable and unreliable, precisely to those institutions that most rely on them to provide an ‘objective’ view of their performance.”

<https://wonkhe.com/blogs/do-university-rankings-measure-anything-at-all/>

How do we solve the problem of bias in research assessment?

Methodically...

1. Define the nature and scale of problem
2. Understand its root causes – share that understanding convincingly
3. Design and test tools and processes to fix it
 - Education, training
 - Methods for credible, time-efficient assessment of the qualities of research
 - Methods to counter the biases rooted in human psychology and society



The screenshot shows the eLIFE website header with navigation links for HOME, MAGAZINE, and INNOVATION. Below the header, the article title is prominently displayed: "Meta-Research: Gender inequalities among authors who contributed equally". The authors listed are Nichole A Broderick and Arturo Casadevall, with their affiliations: University of Connecticut, United States; Johns Hopkins School of Public Health, United States. Social media icons for Facebook, Twitter, Email, and LinkedIn are visible below the authors' names.

When there are joint first authors, reflecting equal contributions, male authors are more likely to be listed first.

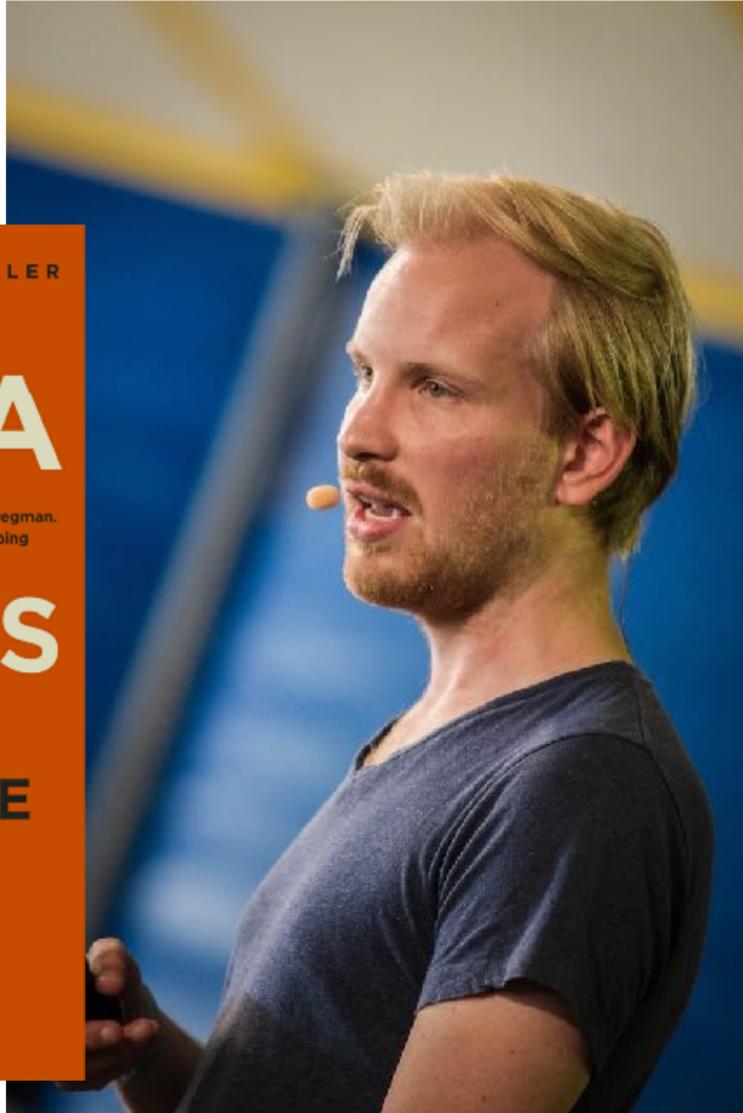
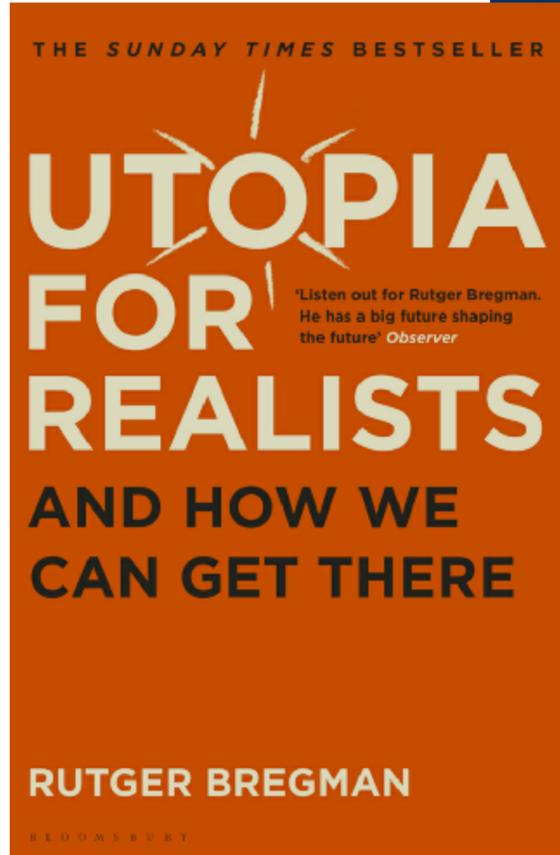


The screenshot shows the F1000Research logo at the top. Below it, the article is labeled as a "RESEARCH ARTICLE" and "REVISED". The title is "Positive bias for European men in peer reviewed applications for faculty position at Karolinska Institutet [version 2; referees: 2 approved]". The authors listed are Sarah Holst and Sara Hägg, with their ORCID iD icons.

For men, merit (judged by peer review) is associated with productivity. For women, there is no such association.

Same applies to ethnic minority candidates.

How do we get to our utopia?



“If we want to change the world, we need to be unrealistic, unreasonable, and impossible.”

Rutger Bregman



<http://www.newyorker.com/magazine/2013/07/29/slow-ideas>

“We yearn for frictionless, technological solutions. But people talking to people is still how the world’s standards change.”

Atul Gawande

Thank you

s.curry@imperial.ac.uk
@Stephen_Curry

